## DISTINGUISHING CHARACTERISTICS SHOWING MOST CHANGES

## **Distinguishing Characteristics Showing Most Changes**

Distinguishing Characteristics	Alternative 1	Alternative 2	Alternative 3
Export Water Quality	Marginal; generally similar to existing conditions	Significant improvement for Contra Costa and South Delta exports	Best quality for South Delta exports but Contra Costa is similar to existing conditions
Diversion Effects on Fisheries	Poor conditions due to continued South Delta exports	Some improvement due to Sacramento River diversion	Best conditions for most aquatic species
Flow Circulation (fish transport)	South Delta export results in unnatural flow patterns which are detrimental to fish	Helps positive flow out of Central Delta but increases cross Delta flow	Restores greater degrees of natural circulation to Delta
Water Supply Opportunities	Generally less opportunity due to no or smaller storages	Improved opportunity due to storage and conveyance	Storage and conveyance further improve opportunity
Total Cost	Generally lowest initial costs	Generally significantly higher costs than Alternative 1	Marginally higher costs than Alternative 2
Operational Flexibility	Generally less flexibility due to fewer storage/conveyance fac.	More flexibility than Alt. 1 to operate for water quality, water supply and ecosystem needs	Isolated facility adds another degree of flexibility to time diverted flows
Risk to Water Supply	Risk is high due to continued use of Delta channels	Generally higher storage than Alt. 1 somewhat lowers risk	Isolated facility provides the greatest reduction in risk

Consistency With		Generally, good consistency for	Somewhat highest consistency
Solution Principles	due to socio-economic impacts	most solution principles	

## **Distinguishing Characteristics Showing Some Changes**

Distinguishing Characteristics	Alternative 1	Alternative 2	Alternative 3
Assurances Difficulty	Least change from existing conditions is easiest to assure.	More change from existing conditions requires more assurances	Greatest change from existing conditions requires the greatest assurances.
Habitat Impacts	Least change from existing conditions creates less habitat impacts	More change from existing conditions creates more habitat impacts.	Greatest change from existing conditions creates the most habitat impacts.
Land Use Changes	Land use changes are generally high with all alternatives due to the ERPP. Alternatives with more facilities somewhat increase these changes.		
Socio-economic Impacts	Generally, highest socio- economic impacts due to large amount of land and water needed for purchase for the ERPP.	Generally, lower socio-economic impacts for Alternatives 2 and 3.	

## **Distinguishing Characteristics Little or No Changes**

Distinguishing Characteristics	Alternative 1	Alternative 2	Alternative 3	
In-Delta Water Quality	Water quality does not vary significantly for in-Delta water users in North or Central Delta. Total dissolved solids increase somewhat in South Delta for alternative 3.			
Storage and Release of Water	All alternatives provide similar benefits due to ERPP flows. Alternatives with storage provide marginally better conditions with some additional opportunity for timing of flows.			
Water Transfer Opportunity	All alternatives have at least 600,000 acre-feet of physical transfer capability through the export system. This identified capacity of each alternative can increase as a result of additional modeling. Preliminary estimates of market willingness to transfer indicates transfer capacity is not the controlling constraint.			
South Delta Access to Water	Other than Alternative 1A, all alternatives provide good access to water due to flow barriers, improved south Delta hydraulics, export from isolated facility, or equivalent.			
Ability to Phase Facilities	All alternatives are almost equally easy to phase. Alternatives with storage may require additional phasing over those with no storage.			
Brackish Water Habitat	Since modeling assumes that Delta standards will be met, there is little change in brackish water habitat between the alternatives.			